

WHAT IS CLAIMED IS:

1. A method of executing a Point-to-Point Protocol (PPP) session comprising the steps of:

negotiating a PPP session for a mobile station on a first Packet Data Service Node (PDSN), the step of negotiating including the step of creating a PPP context relative to that mobile station;

storing the PPP context for that mobile station;

handing over of the mobile station from the first PDSN to a second PDSN;

retrieving the stored PPP context for use by the second PDSN; and

resuming the PPP session on the second PDSN using the retrieved PPP context.

2. The method of claim 1 wherein the PPP session is executed in a cdma2000 network.

3. The method of claim 1 further comprising the step of determining the location of the stored PPP context.

4. The method of claim 3 wherein the step of determining the location of the stored PPP context is accomplished by manual entry of an IP address of a PPP register storing the PPP context.

5. The method of claim 3 wherein the step of determining the location of the stored PPP context is accomplished by a multicast mechanism.

6. The method of claim 1 wherein the step of retrieving comprises the step of determining whether a PPP context relative to the mobile station has been previously stored.

7. The method of claim 6 wherein the step of determining whether a PPP context relative to the mobile station is stored is performed by the second PDSN.

8. The method of claim 6 further comprising the step of creating a PPP context relative to the mobile station in response to a determination that a PPP context relative to the mobile station has not been stored.

9. The method of claim 8 further including the steps of having the first PDSN sending a message to the PPP register directing the PPP register to store the PPP context.

10. The method of claim 1 further comprising the step of periodically updating the PPP context on the PPP register.

11. The method of claim 1 further comprising the step of periodically updating the stored PPP context during the PPP session.

12. The method of claim 1 further comprising the steps of:
terminating the PPP session; and
deleting the PPP context relative to the at least one mobile station in
response to the termination of the PPP session.

13. The method of claim 12 wherein the step of deleting the PPP context
comprises the step of the second PDSN sending a message to a PPP register directing
the PPP register to remove the PPP context.

09702475-103000

14. A wireless communication system for providing Packet Data Services to a mobile station, comprising:

a first Packet Data Service Node (PDSN) engaging in a PPP session with a mobile station, that PPP session having an associated PPP context;

5 a Point-to-Point (PPP) register storing the PPP context relative to the mobile station and its PPP session; and

a second PDSN to which the mobile station is handed over, the second PDSN retrieving the stored PPP context from the PPP register for use in resuming the PPP session with the mobile station following the handover.

15. The system of claim 14 further comprising:

a Radio Network (RN) providing wireless communications with the mobile station; and

an Internet Protocol (IP) network interconnecting the RN with the PDSN.

16. The system of claim 14 wherein the associated PPP context relative to the mobile station is communicated to the PPP register by the first PDSN.

17. The system of claim 14 wherein the mobile station operates according to cdma2000.

18. The system of claim 14 wherein the mobile station is handed over from the first PDSN to the second PDSN during the PPP session.

19. The system of claim 14 wherein the PPP register comprises a standalone node.

20. The system of claim 14 wherein the PPP register is co-located in one of the PDSNs.

21. The system of claim 14 wherein the PPP context is periodically updated on the PPP register.

22. The system of claim 14 wherein, in response to termination of the PPP session, the PPP context relative to the mobile station is deleted from the PPP register.